

IN THE SPECIFICATION

Please insert the following heading at page 1, before the Title:

TITLE OF THE INVENTION

Please insert the following heading at page 1, line 7:

BACKGROUND OF THE INVENTION

Please insert the following heading at page 3, line 26:

BRIEF SUMMARY OF THE INVENTION

Please insert the following headings and paragraph at page 5, line 4:

BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWINGS

Fig. 1 shows embodiments of the invention.

Fig. 2 shows the principal of a flame spray gun.

Figs. 3 and 4 show scanning electron micrographs of an example of the invention.

DETAILED DESCRIPTION OF THE INVENTION

Please amend the paragraph beginning at page 5, line 25, as follows:

The process of the invention for producing surfaces with self-cleaning properties by applying particles to the surface and securing the particles within the surface, thus forming elevations whose separation is from 20 nm to 100  $\mu\text{m}$  and whose height is from 20 nm to 100  $\mu\text{m}$  comprises applying the particles through spray-application of the particles by means of a hot air stream or a flame. The selection of the temperature of the air stream or of the flame has to be such that no thermal damage occurs to the particles used, but nevertheless such that

the action of the flame or air, stream on the material is sufficiently great to heat the surface of the material above its ~~[[last]]~~ glass transition temperature  $T_g$ , with the result that the material of the surface to be treated softens to a degree such that at least part of the periphery of the particles can penetrate the material of the surface, and such that the particles which have penetrated, at least to some extent, the material of the surface, are secured within the surface on cooling of the substrate. Depending on the viscosity and material of the substrate, incipient melting, or merely plasticification, of the material has to take place. The necessary degree of softening may easily be determined for the respective material using simple preliminary experiments. The surfaces produced preferably have elevations whose average height is from 50 nm to 10  $\mu\text{m}$ , and/or whose average separation is from 50 nm to 10  $\mu\text{m}$ , and very particularly preferably whose average height is from 50 nm to 4  $\mu\text{m}$ , and/or whose average separation is from 50 nm to 4  $\mu\text{m}$ . Surfaces produced using the process of the invention are very particularly preferably those whose elevations have an average height from 0.25 to 1  $\mu\text{m}$  and an average separation from 0.25 to 1  $\mu\text{m}$ . For the purposes of the present invention, the average separation of the elevations is the separation of the highest elevation of an elevation from the most adjacent highest elevation. If an elevation has the shape of a cone, the tip of the cone is the highest elevation of the elevation. If the elevation is a rectangular parallelepiped, the uppermost surface of the rectangular parallelepiped is the highest elevation of the elevation.